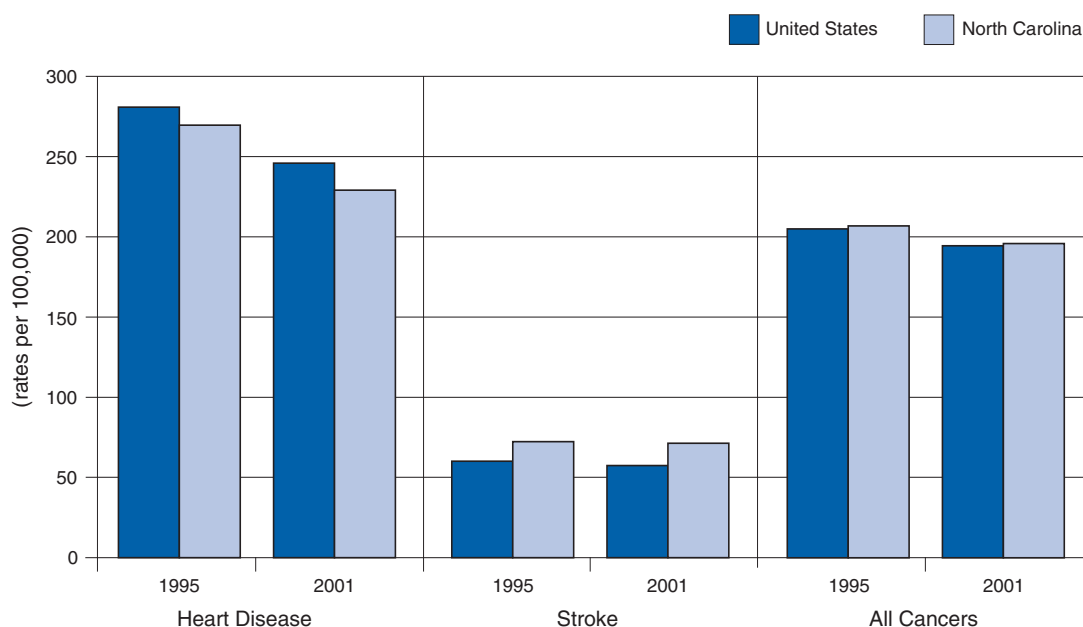


Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and North Carolina, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

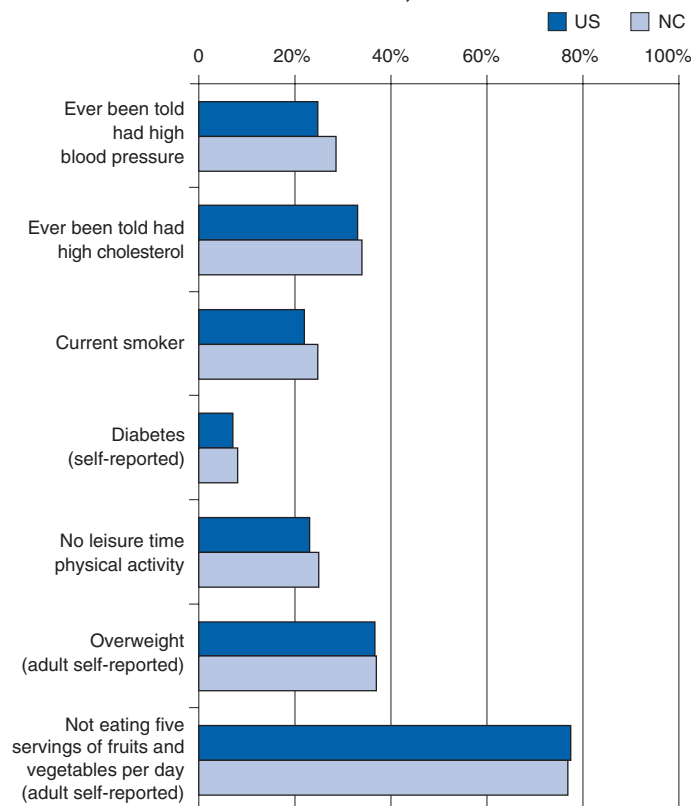
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in North Carolina, accounting for 18,792 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 5,401 deaths or approximately 8% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 16,580 are expected in North Carolina. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 40,240 new cases that are likely to be diagnosed in North Carolina.

Estimated Cancer Deaths, 2004

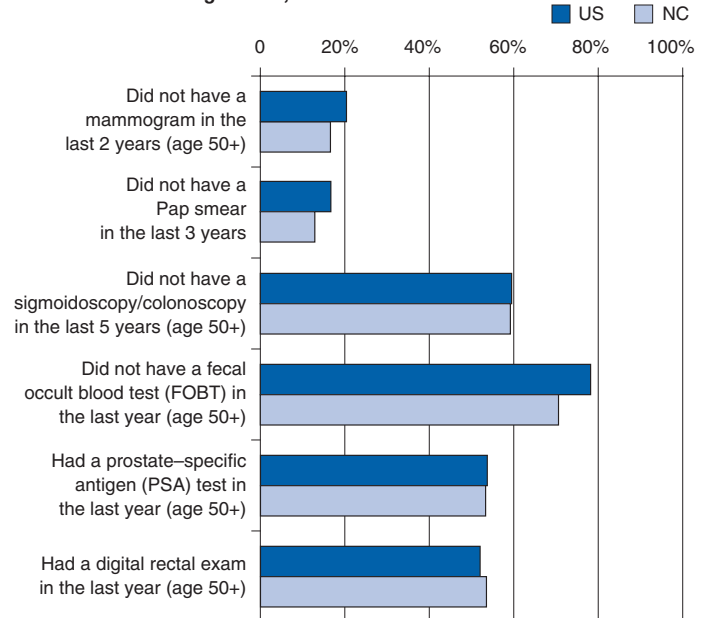
Cause of death	US	NC
All Cancers	563,700	16,580
Breast (female)	40,110	1,090
Colorectal	56,730	1,590
Lung and Bronchus	160,440	5,270
Prostate	29,900	930

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

North Carolina's Chronic Disease Program Accomplishments

Examples of North Carolina's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among white men (280.6 per 100,000 in 1990 versus 256.0 per 100,000 in 2000).
- A 20.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 37.0% in 1992 to 16.6% in 2002).
- Lower mortality rates than the corresponding national rates for female breast cancer deaths among all races (24.3% in North Carolina versus 26.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to North Carolina in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for North Carolina, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) <i>North Carolina BRFSS</i>	\$284,325
National Program of Cancer Registries <i>North Carolina Central Cancer Registry</i>	\$700,757
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	\$1,540,000
Paul Coverdell National Acute Stroke Registry	\$755,999
Diabetes Control Program <i>North Carolina Diabetes Prevention and Control Program</i>	\$876,721
National Breast and Cervical Cancer Early Detection Program <i>Health Promotion and Disease Prevention</i>	\$3,227,933
National Comprehensive Cancer Control Program <i>North Carolina Advisory Committee on Cancer Coordination and Control</i>	\$300,000
WISEWOMAN <i>A New Leaf...Choices for Healthy Living</i>	\$1,250,000
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program <i>North Carolina Tobacco Prevention and Control Program</i>	\$1,672,557
State Nutrition and Physical Activity/Obesity Prevention Program <i>Local Physical Activity & Nutrition Coalitions (LPAN's)</i> <i>Physical Activity and Nutrition (PAN) Grant Program</i> <i>Start With Your Heart NC Cardiovascular Health Program</i> <i>Statewide Health Promotion Program</i> <i>Sybershop</i> <i>Color Me Healthy</i>	\$449,813
Racial and Ethnic Approaches to Community Health (REACH 2010) <i>Carolinas Medical Center (Charlotte Mecklenburg Hospital Authority)</i> <i>Eastern Band of Cherokee Indians</i>	\$924,640 \$774,720
Total	\$12,757,465

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in North Carolina that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

Opportunities for Success

Chronic Disease Highlight: Diabetes

Diabetes is a chronic disease, that affects the body's ability to produce or respond to insulin. Insulin allows glucose (sugar) to enter cells and to be converted to energy. In uncontrolled diabetes, glucose and fats remain in the blood, damaging vital organs. The number of people with diabetes in North Carolina has surpassed one half million and continues to increase. At the same time, modifiable risk factors for the disease, such as lack of exercise, obesity and overweight, and unhealthy diet, have increased in the last decade.

Adult obesity in North Carolina almost doubled from 11.6% in 1990 to 24.0% in 2003. From 1995 to 2000, the prevalence of diagnosed diabetes among adults in North Carolina increased 42%. In 2000, diabetes was the 5th leading cause of death in North Carolina, resulting in 2,078 deaths and, from 1994 to 2000, a 30% increase in mortality rates. In 2001, CDC mortality data indicate that African Americans had a higher diabetes death rate than whites (55.5 per 100,000 for African Americans, compared with 22.0 per 100,000 for whites). In addition, in 2001 men had higher diabetes death rates than women (30 per 100,000 for men, compared with 26 per 100,000 for women).

Physical activity and nutrition are factors that can be modified to reduce the risk of developing diabetes. From 1994 to 2003, the number of adults in North Carolina who reported consuming 5 or more servings of fruits and vegetables increased from 18.9% to 23.1%. The number of North Carolinians who reported engaging in leisure time physical activity increased 10.9%; however, in 2003, 25.0% still did not engage in leisure time physical activity during the past month.

In North Carolina, diabetes is responsible for approximately 14,000 hospitalizations per year and 3,000 lower extremity amputations per year. In 1998, the estimated hospitalization cost for diabetes and related complications in the state totaled more than \$1.5 billion.

The North Carolina Diabetes Prevention and Control Program was developed to address the increased modifiable risk factors among the state's residents. The program works to increase awareness of diabetes and its complications, to monitor the burden of the disease, to help health care providers improve the quality of diabetes education, and to enhance community-based efforts to reduce the burden of diabetes through education and capacity building.

Text adapted from Diabetes in North Carolina: A Summary Report 2002.

Disparities in Health

North Carolina's Hispanic population has experienced rapid growth during the past 10 years. Most of this growth can be attributed to high levels of migration due to economic opportunities in agriculture, construction, and food industries; this growth can also be attributed to high Hispanic birth rates. Estimates of the Hispanic population in North Carolina vary, but data from the 2000 U.S. Census indicated that people of Hispanic origin represented 4.7% of the state's population—378,963 people.

As is the case with other racial and ethnic minorities, Hispanics are disproportionately affected by certain health problems. Although injury and homicide are leading causes of death for Hispanics, chronic disease disparities also exist, especially for diabetes and cardiovascular disease.

Although state-specific data on diabetes and cancer among Hispanics are limited, national data indicate that the rate of diabetes is increasing. In the United States, diabetes increased among the general population from 28 cases per 1,000 in 1986 to 30 cases per 1,000 in 1994. During the same period, the increase among Mexican Americans was much higher, increasing from 54 cases per 1,000 to 66 cases per 1,000.

Risk factors for cardiovascular disease include high blood pressure, diabetes, obesity, and high blood cholesterol. In 2003, according to CDC's Behavioral Risk Factor Surveillance data, over one quarter of Hispanics in North Carolina reported that they had been told they had high blood cholesterol and 8.5% had been told they had high blood pressure. These data also indicate that 40.2% of Hispanics are overweight and 21.5% are obese.

Other Disparities

- **Obesity:** African Americans in North Carolina are more likely to be obese than whites (35.0% versus 21.6%).
- **Breast and Cervical Cancer:** In 2002, African American women were more likely to have had a mammogram in the last 2 years than white women (86.7% versus 83.0%); however, in 2000, African American women in North Carolina had a higher breast cancer death rate (31.4 per 100,000) than white women (22.6 per 100,000). In 2002, African American women also were more likely to report having had a Pap smear in the last 3 years than white women (93.1% versus 85.3%); however, in 2000, African American women had a higher cervical cancer death rate (6.7 per 100,000) than white women (2.6 per 100,000).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
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